

**What is Claimed is:**

1. An apparatus comprising:
  - a) an exothermic hydrogen generator; and
  - b) an endothermic hydrogen generator, the endothermic hydrogen generator to absorb heat from the exothermic hydrogen generator.
2. The apparatus of claim 1, further comprising a fuel cell operably coupled to the endothermic and exothermic hydrogen generators.
3. The apparatus of claim 2, further comprising a portable electronic device operably coupled to the fuel cell.
4. The apparatus of claim 1, wherein said exothermic hydrogen generator comprises at least one of a borohydride solution, solid lithium aluminum tetrahydride and a partial oxidation hydrocarbon reformer.
5. The apparatus of claim 4, wherein said exothermic hydrogen generator comprises a sodium borohydride hydrogen generator.
6. The apparatus of claim 1, wherein said endothermic hydrogen generator comprises at least one of one or more metal hydrides, one or more metal alloy hydrides, a carbon nanotube system, compressed hydrogen gas, liquid hydrogen and a steam hydrocarbon reformer.
7. The apparatus of claim 6, wherein said endothermic hydrogen generator comprises one or more metal hydrides.
8. The apparatus of claim 1, further comprising a control system to regulate the rate of exothermic hydrogen generation.
9. The apparatus of claim 1, further comprising a control system to regulate the rate of endothermic hydrogen generation.
10. The apparatus of claim 2, wherein the fuel cell is thermally neutral.
11. The apparatus of claim 2, wherein the fuel cell is endothermic.
12. An apparatus comprising:
  - a) an exothermic hydrogen generator;
  - b) an endothermic hydrogen generator;
  - c) a fuel cell operably coupled to the endothermic and exothermic hydrogen generators; and

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- d) a portable electronic device operably coupled to the fuel cell.
- 13. The apparatus of claim 12, wherein said exothermic hydrogen generator comprises:
  - (i) an aqueous solution of sodium borohydride; and (ii) a catalyst.
- 14. The apparatus of claim 12, wherein said endothermic hydrogen generator comprises one or more metal hydrides.
- 15. A method of generating hydrogen comprising:
  - a) generating hydrogen by an exothermic process; and
  - b) generating hydrogen by an endothermic process.
- 16. The method of claim 15, further comprising providing hydrogen to a fuel cell.
- 17. The method of claim 16, wherein said fuel cell is operably coupled to a portable electronic device.
- 18. The method of claim 15, wherein said exothermic process comprises reacting an aqueous solution of sodium borohydride with a catalyst.
- 19. The method of claim 18, wherein the catalyst comprises platinum.
- 20. The method of claim 15, wherein said endothermic process comprises releasing hydrogen from a metal hydride.
- 21. The method of claim 15, further comprising controlling the rate of the exothermic process.
- 22. The method of claim 15, further comprising controlling the rate of the endothermic process.
- 23. The method of claim 15, wherein the production of heat by the exothermic process and the absorption of heat by the endothermic process are approximately equal.